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SERIAL NUMBER	FILING DATE	FIRST NAME INVENTOR	ATTORNEY DOCKET NO.
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07/741,570 09/07/91 COATES

1 REF/SN339

EXAMINER

ROTMAN, A

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BACON AND THOMAS  
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ART UNIT	PAPER NUMBER
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1203

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DATE MAILED: 03/27/92

 This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |                                                                                     |                                                                                  |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                   |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____                                                |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-39 are pending in the application.  
Of the above, claims 39 are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-12, 22, 23, 26, 29, 32, 36, 37 are rejected.
5. ☒ Claims 24, 25, 27, 28, 30, 31, 33, 34, 35, 38 are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation).
12. ☒ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☒ been filed in parent application, serial no. 07/239,624; filed on 09-02-88
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

**EXAMINER'S ACTION**

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Claims 1-12, 22, 23, 26, 27, 32, 36 and 37 are rejected under Judicially Created doctrine as being drawn to an improper Markush group on the grounds of lack of a common nucleus. For example, the main nucleus may represent a tetrahydro-1H-pyrido[4,3-b]-indol-1-one on the one hand or a tetrahydro-azepino [4,3-b]-indol-1(2H)one on the other hand which are patentably distinct ring systems and separately classified. The problem is exacerbated with respect to the term ( $R^1$ ) which represents hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, phenyl, phenyl-alkyl, phenylmethoxymethyl, phenoxy-ethyl or phenoxyethyl on one hand or a functional group selected from  $-CO_2R^5$ ,  $-COR^5$ ,  $-CONR^5R^6$  or  $-SO_2R^5$  on the other hand.

The improper Markush rejection finds basis in case law, compare In re Harnisch 206 U.S.P.Q. 300 (CCPA 1980); In re Swenson 56 USPQ 180; In re Ruzicka 66 USPQ 226 and In re Winnek, 73 U.S.P.Q. 225. In view of the foregoing, restriction is required to one of the following inventions is required.

Group I: Claims 1-12, 22, 23, 26, 29, 32, 36 and 37 in part, compounds, pharmaceutical compositions and methods of use according to the formula I of claim one wherein the integer (n) in said formula represents the whole number 2 or 3; the term "Im" represents both imidazolyl groups as defined in claim one; the term ( $R^1$ ) represents hydrogen,  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -alkenyl,  $C_3$ - $C_{10}$ -alkynyl,  $C_3$ - $C_7$ -cycloalkyl,  $C_3$ - $C_7$  cycloalkyl- $C_1$ - $C_4$ -alkyl, phenyl,

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phenyl-C<sub>1</sub>-C<sub>3</sub>-alkyl, phenylmethoxy-methyl, phenoxyethyl, phenoxymethyl, claims 23-28, 30, 31, 33-35 and 38 are readable thereon.

Group II: Claims 1-12, 22, 23, 26, 29, 32, 36 and 37 in-part and Group I except that the term (R<sup>1</sup>) represents the functional groups selected from -CO<sub>2</sub>R<sup>5</sup>, -COR<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -SO<sub>2</sub>R<sup>5</sup> wherein R<sup>5</sup> and R<sup>6</sup> are as defined in claim one supra.

Group III: Claim 39 drawn to a non-specific chemical process.

These inventions are distinct from one another as each Group has achieved a separate status in the art, have fields of search which are not coextensive and are capable of supporting separate patents. Claim 39 as well as the claimed subject matter of Group II stands withdrawn from further consideration, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made with traverse by applicants' attorney, Mr. Richard E. Fichter pursuant to the telephonic interview of March 19, 1992 wherein the invention identified as Group I was provisionally elected for a complete examination on the merits.

The Group I invention has been examined and found allowable except as to form.

Claims 24, 25, 27, 28, 30, 31, 33-35 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the

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limitations of the base claim and any intervening claims.

A prior art statement in compliance with 37 CFR 1.56 and 1.97-1.99 would be appreciated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan L. Rotman whose telephone number is (703) 308-4698.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1235.

Rotman:st  
March 26, 1992

*Alan L. Rotman*  
ALAN L. ROTMAN  
PRIMARY EXAMINER  
ART UNIT 1203